

Jet Propulsion Laboratory

Acquisition Planning and Compliance Section

March 6, 2012



Overview

- Contract Elements
- Bilateral versus Unilateral
- Completion vs. Term-type
- Award-Type Impact
- Pricing Arrangements
- Other contract applications
- Selection factors
- Summary
- References



Workshop Objectives

- Learn about different contract types
 - Characteristics
 - Determine appropriate use
- Risk Analysis- Key selection factor
 - Assessing risk
 - Understand fee/profit impact
 - Understand potential business impact



Definition of a Contract

"A Contract is a promise, or set of promises, for breach of which the law gives a remedy, or the performance of which the law in some way recognizes a duty" Williston, Contracts, Section 1, 3rd Ed. 1957 (4th Ed. 1990)

Elements of a Contract

- "Legally enforceable"
- Competent parties
- Lawful purpose
- Legally sufficient "consideration"
 - Money
 - Other
- Written agreement
- Terms



Elements of a Contract (cont.)

- Federal Acquisition Regulation (FAR 2.101):
 - Mutually binding legal relationship
 - Seller obligated to furnish supplies or services
 - Buyer obligated to pay
- Terms
 - Boilerplate" provisions
 - Period of performance
 - Price and payment



Bilateral vs. Unilateral

- Bilateral agreement
 - A mutual exchange of promises
 - Types
 - Basic (new) contract
 - Supplemental Agreement (SA) (aka a "mod")
 - Bilateral subcontract change in scope, quantity, schedule
 - Purchase Order
 - Only if acceptance copy is signed and received
 - No exceptions can be taken
 - Undefinitized SA (JPL)
 - Everything but price agreed to



Bilateral vs. Unilateral

- Unilateral agreement
 - Only one promise(usually by buyer)
 - Types
 - Purchase Order
 - Unilateral Modification (aka "UCA")
 - Increased funding
 - Administrative correction
 - Change Under CHANGES Clause



Completion Vs. Term

Type of Effort

Description/Factors

Task (completion-type)

Requires delivery of specified *end-item*

Term-type (Level-of-Effort)

Requires specified level of effort over a period of time

Award Type

- Competitive
- Noncompetitive
- NASA or Sponsor-Directed
 - Competitive
 - You may have to propose FP
 - Make sure you can perform
 - Non-competitive
 - You might insist on cost-type
 - --Note: Determine who is making source selection decision



Pricing Arrangement

- Allocates cost risk between JPL and contractor
- Fixed-price type contracts
 - More risk on contractor
- Cost-type subcontracts
 - More risk on buyer
- Many variations of above
 - CPFF/IF/AF; On-orbit fee pools



Fixed Price	Cost Reimbursement	Time and Material/L/H
Firm-fixed price	Cost reimbursement	Time and material
Fixed price with economic price adjustment	Cost-plus-a-percentage- of cost	Labor-hour
Fixed-price incentive	Cost-plus-fixed fee	
	Cost-plus-incentive fee	
	Cost-plus-award fee	

Type of Subcontract

Commercial items and services (CIS)

Characteristics

- -Customarily used for *nongovernmental* purposes
- -Sold/licensed/leased to general public -OR-
- -Offered for sale to general public
- -Evolved from above that will be available to general public by time of delivery requirement
- -Minor mods thereto
- -Installation services, maintenance, repair to support above items AND
- -Offered to govt. and general public under similar terms



Misuse of CIS Contracts

- Item or service not commercial
- Mods of items too extensive
- R&D or developmental work involved
- Services based on hourly rates without established catalog or market price for specific service performed



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Characteristics

Fixed-price

FAR 16.2

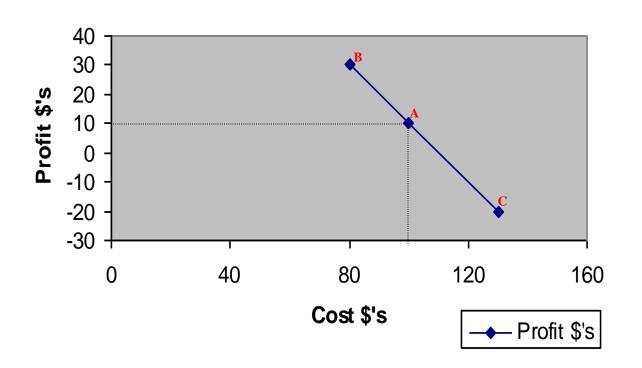
- -Well-defined requirements
- -Competition exists or price readily estimated
- -Supplier willing to accept FP
- -Technical risk relatively low
- -Amount of R&D not extensive
- -Preferred subcontract type (in theory)
- -Most commonly used in Govt.



A C Q U I S I T I O I

COMPLETION TYPE - FIRM FIXED PRICE

(CONTRACTS AND PURCHASE ORDERS)



EXAMPLES

A. PROPOSED \$110K

COST <u>100</u>

PROFIT \$10K

B. PROPOSED \$110K
 COST <u>80.</u>
 PROFIT \$30K

C. PROPOSED \$110K

COST 130

LOSS <\$20K>

(A, B and C represent different actual costs)



Type of contract

Labor-Hour

(FAR 16.601)

Time-and-material

Characteristics

- -Support from company individuals
- -Fixed hourly rates
- -Rate includes all cost elements (including profit)

Same as above, but with materials

- -No profit on materials
- -May have handling charge



Type of contract

Cost-reimbursable

(FAR 16.3)

General Characteristics

- -Govt. assumes cost risk
- -Costs reimbursed if:
 - -Allowable/Allocable/ Reasonable
- -"Best efforts"
- -Value relatively large
 - -Adequate accounting system
 - -R&D often involved
- -Requires oversight/audit
- -May take years to close out



Pricing Arrangements by Incentive Type

<u>Type of contract</u>

Cost-reimbursable

Sub-types

- -Cost-Reimbursable with an Educational Institution (CREI)
- -Cost-Plus Fixed Fee (CPFF)
- -Cost-Plus Incentive Fee (CPIF)
- -Cost-Plus-Award Fee (CPAF)
- -Cost-sharing
- -Award Term



Type of contract

Cost-Plus-Fixed-Fee (CPFF)

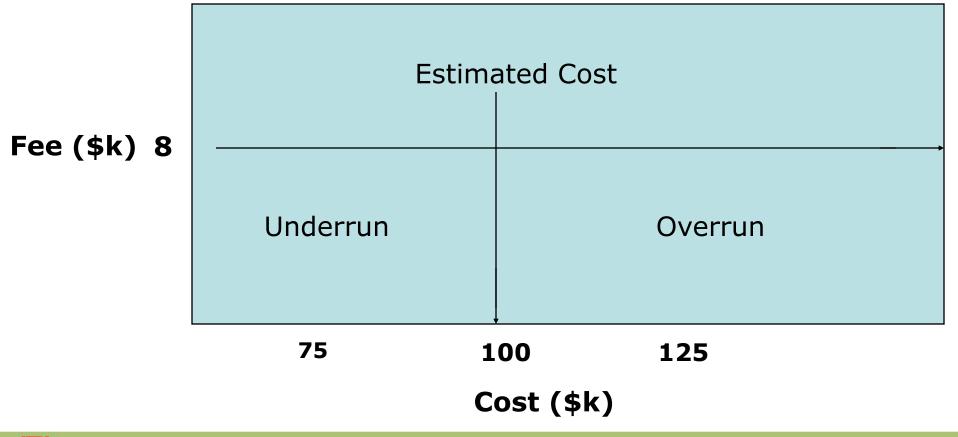
<u>Characteristics</u>

- -Used for basic research and new, high-risk R&D
- -Fee subject to FAR cap
- -Fee (once negotiated) does not vary with cost experience of contractor
 - -Exception: Modifications
- -Advantage: Allows extensive buyer interaction with contractor
- -**Drawback:** Little incentive for contractor to minimize costs



Pricing Arrangements by contract type ACQUISITION

COMPLETION TYPE – Cost Plus Fixed Fee





Type of contract

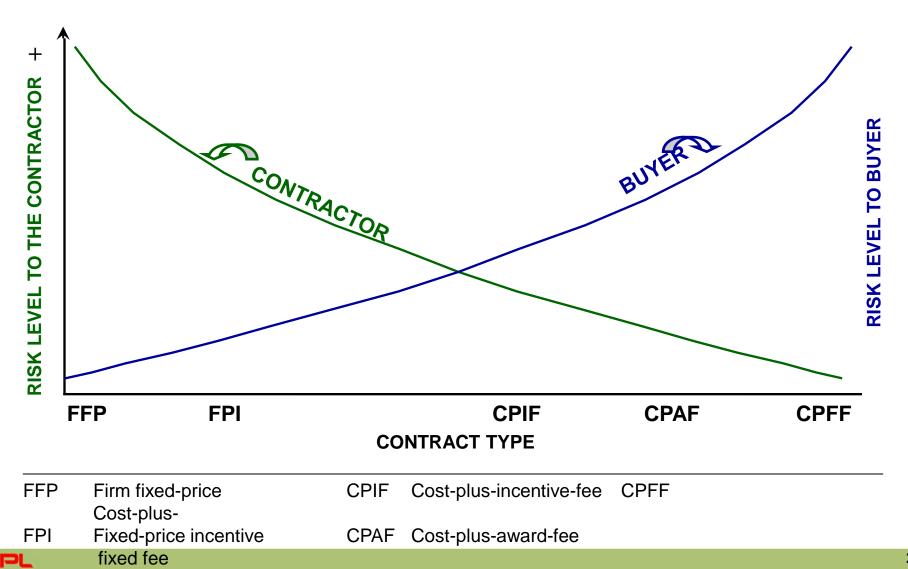
Cost-Plus-Award-Fee (CPAF)

Characteristics

- Fee subject to FAR cap
- -Used for large, complex efforts
- -Letter of emphasis used
- -Fee is:
 - -Subjective
 - -Periodically determined by buyer
 - Unilateral
- --**Drawback**: Expensive to administer



Contract Type Risk Sharing Comparison



Pricing Arrangement (cont.)

Selection dependent on type of profit incentive

HIGH PROFIT INCENTIVE

FFP
FPI
CPIF
CPAF
CPFF

LOW PROFIT INCENTIVE



Overuse of cost-type contracts

- Used when we don't know what we want
 - **Solution**: Develop good requirements
- Assuming contractor will only accept cost-type contract
 - **Solution**: Send them the RFP
- Contractor previously lost money on fixed-price subcontract
 - "Solution": Issue cost-type contract
- JPL maintains greater control over a contractor
 - -True, but at considerable expense
 - -May be worth it for mission/schedule-critical items



Other Subcontract Tools

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Start-up contract

Letter contract

Indefinite-delivery

Contract work order (CWO)

Characteristics

- -Preferred instrument to commence urgent work
- -Specific scope, amount and duration
- -Allows work to start before agreement reached
- -High risk for JPL--rarely used

Allows for flexibility in both quantities and scheduling of deliveries

-Orders released under broader contract

Other contract types

- I-Procurement, Purchase cards
- Purchase Orders
- Consulting agreements
- Leases, rentals, loan agreements
- Basic Agreements, Blanket Purchase Agreements, Indefinite Delivery/Indefinite Quantity agreements (IDIQs)



Other contract types (cont.)

- Consulting Agreements (FAR 31.205-33)
 - For advisory services of experts
 - May involve reports, recommendations



Other contract types (cont.)

- Equipment Leases/Rentals
 - Use When:
 - Item required for limited time
 - Lease vs. purchase analysis shows lease costs less
 - If funding not available, consider lease with purchase option



Other contract types (cont.)

- Loan Agreements
 - Used when buyer wants an item for evaluation
 - Issues
 - Installation/shipping/other expenses
 - Risk of loss
 - If you need to borrow something from an agency
 - Read terms and conditions carefully
 - Caution: May make your proposal less competitive



Factors in selecting contract type

	Fixed-Type	Cost-Reimbursable
Requirements	Clearly defined •Product and/or service •Off-the-shelf or minor mods	Not well defined •Completion (goal/product) •Term (level of effort [LOE])
Costs	Controlled by contract type •Increased only by change	Reimbursable if authorized, allocable, allowable & reasonable
Oversight	Monitor only performance and schedule	Monitor all aspects of cost, schedule, and performance
Excess/ Residual Materials	Owned by contractor	Owned by government
Performance	Performance or delivery maximized	Best efforts—no guarantee
Changes	Equitable adjustment for changed	Equitable adjustment for

scope

changed scope

Factors in selecting contract type

	Type of Subcontract		
Factor	Fixed-Price	Cost-Type	
Who assumes more risk	Contractor	Buyer	
Contract adjusts without scope change	No	May—cost growth, overhead growth	
JPL pays for growth	No, unless scope change	Yes—if deemed allowable, directly related to contract and funding available	
Funds to contractor	Normally 100% at start, or fund incrementally	Normally incrementally funded	
Performance or delivery schedule	Time is of the essence	Best efforts	



Factors in selecting contract type

	Type of contract		
Factor	Fixed-Price	Cost-Type	
Permissible to terminate contract	Yes, possible damages	Yes, possible damages	
Contractor assumes cost growth, risks, with same scope and schedule	Yes	Normally not. May build into contract and negotiate (rate ceilings, etc.)	
Mix cost-type and fixed-price in same contract vehicle	Normally not combined	Normally not combined	
Closeout costs	No	Yes. Submit rate adjustments, etc.	
NASA Form 533 cost report	No	Normally yes (over certain contract values, or dependent on complexity)	



Summary

- If Govt. wants fixed price, make sure you can perform
- Make sure Statement of Work is complete
 - Resolve ambiguities and TBDs prior to start
- Ensure contract type fairly allocates risk
- Meet with Govt. to refine, if necessary



References

- FAR Part 16-Types of Contracts
 - https://www.acquisition.gov/far/html/FAR TOCP16.html

ACQUISITION

- Comparison of Major Contract Types— Chart
 - Comparison of Major Contract Types MARCH 2011 Version Final [PRINT].ppt
 - Comparison of Major Contract Types MARCH 2011 Version Final [VIEW].ppt

(Courtesy Defense Acquisition University-Updated March 2011)

